

***Penstemon bicolor*** (Brandege) Clokey & Keck **ssp. *bicolor*****YELLOW TWOTONE BEARDTONGUE**

**FAMILY:** *Scrophulariaceae*, the figwort family.

**SYNONYMS:** *Penstemon palmeri* var. *bicolor*  
*Penstemon pseudospectabilis* ssp. *bicolor*  
*Penstemon bicolor* (?)

**STATUS:**

**Heritage Program SENSITIVE LIST, ranks: G3 T2Q S2**

**USFWS/ESA:** species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species in Nevada.

**USFS:** Humboldt-Toiyabe NF Sensitive Species. **NNPS:** watch list.

**POPULATION CENSUS:** **31 occurrences mapped** at 1.0 km (0.6 mi) separation, OR **34 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 784+**, total estimated **area unknown**. **TREND:** DECLINING.

**IMPACTS AND MAJOR THREATS:** Urban expansion of Las Vegas.

**INVENTORY EFFORT:** Surveys have been extensive and are ongoing. Most recent entered survey 1999, average year of last survey 1980. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 2.9%; **6-10 yrs:** 42.9%; **11-20 yrs:** 11.4%; **21-30 yrs:** 25.7%; **31-50 yrs:** 2.9%; **51+ yrs or unknown:** 14.3%.

**LAND MANAGEMENT** in decreasing predominance: U. S. Bureau of Land Management, private lands, Nevada state lands (?), Humboldt-Toiyabe National Forest (?), National Park Service (?).

**RANGE:** Clark County, Nevada; also in CA (?). Possible or probable **Nevada endemic**. Maximum **range dimension 95.8 km (59.5 mi)** excluding most disjunct record. **Type specimen** collected in Clark County.

**ELEVATIONS RECORDED (NEVADA):** 2500-5480 feet (762-1670 meters).

**HABITAT:** Calcareous or carbonate soils in washes, roadsides, rock crevices, outcrops, or similar places receiving enhanced runoff, in the creosote-bursage, blackbrush, mixed-shrub, and lower juniper zones.

**PHENOLOGY:** flowering spring. Range of most frequent **survey months:** April-May.

**LIFE-FORM AND HABIT:** perennial herb.

**DESCRIPTION:** not available (see references).

**PHOTOGRAPHS:** Weixelman and Atwood (1990); Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

**ILLUSTRATIONS:** Mozingo and Williams (1980), Weixelman and Atwood (1990).

**OTHER GENERAL REFERENCES** (listed separately): Clokey (1951), Hickman (1993), Niles et al. (1998), Niles et al. (1999).

**SPECIFIC REFERENCES:**

Clokey, I. W. and D. D. Keck. 1939. Reconsideration of certain members of *Penstemon* subsection *Spectabiles*. Bulletin of the Southern California Academy of Sciences 38: 8-13.

Keck, D. D. 1937. Studies in *Penstemon* V. The section *Peltanthera*. American Midland Naturalist 18: 790-829.

Morefield, J. D. 1992. Status report for *Opuntia whipplei* Engelm and *Bigelow* var. *multigeniculata* (Clokey) L.

Benson. Carson City: Nevada Natural Heritage Program, prepared for the U. S. Fish and Wildlife Service, Reno.

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